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IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

Karen Luciano
3Mashpa Road
Harwich, MA 02645

and

Joseph Luciano
3 Mashpa Road
Harwich, MA 02645

Plaintiffs,

vs.

Civil Action No: _____

WYETH, INC.
5 Giralda Farms
Madison, New Jersey 07940

SERVE: Prentice Hall Corp. Systems
830 Bear Tavern Road
Trenton, NJ 08628

04 12350 NG

and

WYETH PHARMACEUTICALS INC.
500 Arcola Drive
Collegeville, Pennsylvania 19426

MAGISTRATE JUDGE Bowler

SERVE: Corporation Service Company
2704 Commerce Drive
Josephburg, PA 17110

Defendants.

PLAINTIFFS' COMPLAINT AND JURY DEMAND

NOW COMES the Plaintiffs, Karen Luciano and Joseph Luciano, by and through their attorneys, Pollack & Flanders, LLP., and for their causes of action, sue the Defendants, and allege as follows:

PREAMBLE

Since the first estrogen pill was introduced in 1942, makers of synthetic sex hormones have created a marketing and cultural phenomenon. Drug companies' claims to support the use of hormone therapy were never backed by reliable scientific evidence, despite a flood of drug-company promotions.

In July, 2002, federal officials abruptly stopped a trial of hormone therapy drugs that was being conducted by the Women's Health Initiative (WHI). The WHI trial revealed that women taking Prempro, a combination of estrogen and progestin hormones, experienced an increased incidence of breast cancer, heart disease and stroke. Another study published later the same month showed that women taking estrogen-only pills were at greater risk to develop ovarian cancer. The *New England Journal of Medicine* concluded in February, 2003, that the "risks of breast cancer, venous thromboembolism, and stroke are too high a price to pay" for unsubstantiated benefits of hormone therapy.

Subsequent studies following WHI demonstrate conclusively that evidence-based medicine took a back seat to "conventional wisdom." The *New England Journal of Medicine* wrote in October, 2003:

> The simple and intuitively appealing concept that replacing estrogen lost during menopause would be beneficial was easy for both patients and physicians to believe. . . . *As a result, many people suspended ordinary standards of evidence* concerning medical interventions . . . despite the absence of any large scale clinical trial quantifying its overall risk-benefit ratio. [Emphasis added].

The Plaintiffs in this lawsuit will prove that these hormone drugs were unreasonably dangerous for any long term use, and that the Defendants promoted synthetic hormone drug therapy without conducting appropriate long-term, clinical trials to support their claims. The Plaintiffs will further prove that Wyeth pushed hormone therapy onto the medical community, without sufficient warnings. Had Wyeth acted appropriately, thousands of women nationwide, and the Plaintiffs herein, would not have been injured by these drugs.

I. PARTIES

1. Plaintiff Karen Luciano is a United States citizen, residing at 3 Mashpa Road, Harwich, Massachusetts.

2. Plaintiff Joseph Luciano is a United States citizen, residing at 3 Mashpa Road, Harwich, Massachusetts

3. At all times relevant hereto, and now, Plaintiffs Carol and Joseph Luciano were married and living together as husband and wife.

4. Wyeth, Inc. is a Delaware corporation with a principal place of business located at 5 Giralda Farms, Madison, New Jersey. At all times relevant hereto, Wyeth was engaged in , *inter alia*, the business of testing, manufacturing, labeling, marketing, distributing, promoting, and selling of hormone therapy drugs, including Premarin, Prempro, and medroxyprogesterone acetate. Plaintiff alleges on information and belief that Wyeth, Inc., does business in the Commonwealth of Massachusetts and, at all times relevant hereto, it tested, manufactured, labeled, marketed, distributed, promoted, and sold the drugs Premarin, Prempro and medroxyprogesterone acetate.

5. Wyeth Pharmaceuticals Inc. is a Delaware corporation with headquarters and a principal place of business located at 500 Arcola Drive, Collegeville, Pennsylvania. At all times relevant hereto, Wyeth Pharmaceuticals Inc., was engaged in, *inter alia*, the business of testing, manufacturing, labeling, marketing, distributing, promoting, and selling of hormone therapy drugs, including Premarin, Prempro, and medroxyprogesterone acetate. Plaintiff alleges on information and belief that Wyeth Pharmaceuticals, Inc., does business in the Commonwealth of Massachusetts and, at all times relevant hereto, it tested, manufactured, labeled, marketed, distributed, promoted, and sold the drugs Premarin, Prempro and medroxyprogesterone acetate.

II. JURISDICTION/ VENUE

6. The amount in controversy exceeds seventy-five thousand dollars ($75,000.00) exclusive of costs and interest, and diversity jurisdiction exists pursuant to 28 U.S.C. §1332.

7. Venue is proper in this jurisdiction pursuant to 28 U.S.C. § 1391.

8. The Defendants committed a tortious act within the Commonwealth of Massachusetts causing injury to Plaintiffs. Defendants regularly do or solicit business or engage in other persistent courses of conduct or derive substantial revenues from goods used and consumed in the Commonwealth of Massachusetts, or for services rendered in the Commonwealth of Massachusetts, and said Defendants expected or reasonably should have expected that their tortious acts would have consequences in the Commonwealth of Massachusetts, and Defendants derive substantial revenue from interstate and/or international commerce, including the Commonwealth of Massachusetts.

9. The Defendants committed a tortious act within the Commonwealth of Massachusetts by marketing, distributing, retailing and selling a dangerous and defective drug within the Commonwealth of Massachusetts to Plaintiff Karen Luciano and/or anyone else who may have consumed the defective product, and did cause serious and permanent injury to the Plaintiff.

10. The Defendants regularly solicited business within the Commonwealth of Massachusetts and engaged in the persistent course of conduct of distributing, retailing and transporting certain of its products within the Commonwealth of Massachusetts and to many of the other states within the United States, and derived substantial revenues from goods or services rendered in the Commonwealth of Massachusetts.

III. FACTUAL BACKGROUND

A. Case Specific Facts

11. Karen Luciano was under the routine care of Lucy Paniszyn, M.D. of Newton, Massachusetts.

12. In approximately 1991, Dr. Paniszyn prescribed Premarin for Mrs. Luciano.

13. In approximately 1996, Dr. Paniszyn changed Mrs. Luciano's hormone therapy medication to Prempro. Mrs. Luciano continued to take Prempro, as prescribed, through November 5, 2001.

14. On or about November 5, 2001, Mrs. Luciano was diagnosed with deep venous thrombosis.

15. As a direct result of being prescribed and taking Premarin, and then Prempro, Plaintiff Karen Luciano was diagnosed with pulmonary embolism and deep venous thrombosis, suffered severe conscious pain and suffering, mental anguish, damage to the marital relationship, lost economic benefits as well as expenses for care, treatment and hospitalization among other damages.

B. The Marketing of Hormone Therapy

16. Menopause is the cessation of menstruation caused by declining levels of estrogen and progesterone. It is a natural human phenomenon -- a phase of the female reproductive aging process -- not a disease. Symptoms, which vary in severity from woman to woman, may include hot flashes, chills, vaginal dryness, headache and irritability. Adverse consequences of the drop in estrogen levels which begin with menopause and continue after menopause include, *inter alia*, vaginal atrophy and dryness; an increase in LDL cholesterol levels; and, a decrease in bone density with resultant increased risk of osteoporosis.

17. These symptoms and consequences of menopause have been described in scientific literature since the late 1800s, and by the turn of the 20th century, the search for an aid to alleviate them was widely pursued.

18. In 1942, Ayerst, the predecessor to Wyeth, received patent and FDA approval for Premarin, a mix of estrogens extracted from the urine of pregnant mares. Premarin was marketed to women and their physicians as the long sought after replacement for lost estrogen in menopausal women, and was referred to as "replacement" estrogen therapy.

19. The FDA originally approved Premarin only to relieve menopausal symptoms, such as hot flashes and vaginal atrophy. Wyeth, however, has long touted additional benefits for Premarin, and its subsequently marketed hormone therapy drugs, Prempro and medroxyprogesterone acetate.

20. In the 1960s, Wyeth's Premarin promotional materials used articles and books written by Dr. Robert Wilson. Dr. Wilson, a Brooklyn, New York, gynecologist, recommended that women use Premarin for reasons far beyond those approved by the FDA. In a 1962 article which appeared in the *Journal of the American Medical Association* (*JAMA*), Dr. Wilson claimed that taking estrogen during menopause *reduced* breast and genital cancers. In his 1966 book, Feminine Forever– which Wyeth's sales forces distributed to physicians throughout the country – Dr. Wilson wrote that "aside from keeping a woman sexually attractive and potent . . . estrogen preserves the strength of her bones, the glow of her skin, the gloss of her hair. . . . Estrogen makes women adaptable, even-tempered, and generally easy to live with." In the book, Dr. Wilson again asserted that estrogen prevented cancers.

21. Following Dr. Wilson's publications, sales of Premarin quadrupled. Wyeth poured thousands of dollars into Dr. Wilson's research. By the mid-1970s, more than 30 million prescriptions for Premarin were being written every year, eventually making it the fifth most frequently prescribed drug in the United States.

22. Physicians were instructed in advertisements to prescribe Premarin to achieve "tranquilizing" effects for their female patients – as if that effect was a laudable goal: "Almost any tranquilizer might calm her down . . . but at her age, estrogen may be what she really needs."

23. The promotional advertising downplayed the risks of hormone therapy and over promoted the benefits. A 1970s article in *Harper's Bazaar* claimed: "There doesn't seem to be a sexy thing estrogen can't and won't do to keep you flirtatiously feminine for the rest of your days . . . a real package deal that spruces up your vagina. . . . Prevalent medical opinion is that the safety and benefits of ERT have been convincingly demonstrated."[1]

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[1] "ERT" is shorthand for Estrogen Replacement Therapy (e.g., Premarin taken alone).

24. But the "safety and benefits" of Premarin were cast in serious doubt following a 1976 study published in the *New England Journal of Medicine* evidencing a causal relationship between estrogen and endometrial cancer. Sales plummeted, and physicians stopped prescribing Premarin except to those women who had hysterectomies and thus were not at risk for endometrial cancer.

25. A 1980 medical article suggested a solution. Dr. Don Gambrell, a reproductive endocrinologist, reported in the journal *Obstetrics and Gynecology* that adding progestin to estrogen led to a *decline* in endometrial cancer. Wyeth thus produced and marketed progestin (i.e., synthetic progesterone or medroxyprogesterone acetate) as an adjunct to Premarin estrogen hormone therapy to protect against the risk of endometrial cancer.

26. Wyeth manufactures, sells and distributes medroxyprogesterone acetate for use in combination with Premarin under trademarked brand names such as Provera and Cycrin, and as generic equivalents. And, Prempro has the added synthetic progesterone.

27. Additional claims were made in the 1980s when Wyeth promoted hormone therapy to help prevent bone loss, and when Wyeth claimed that hormone therapy drugs could prevent cardiovascular disease. By claiming that hormone therapy drugs prevented osteoporosis and cardiovascular disease, Wyeth was able to promote Premarin as recommended treatment for all women, regardless of whether they were experiencing menopause. As a result, between 1990 and 1995, Premarin became the most frequently dispensed prescription drug in the United States.

28. Premarin's huge success was bolstered by claims that indefinite, long term use of estrogen therapy was safe and efficacious. In an early 1990s promotional videotape distributed directly to consumers entitled *"What Every Woman Should Know About Estrogen,"* Wyeth represented to women that estrogen provided "long term health protection" and should be continued indefinitely, even after short-term menopausal symptoms, such as hot flashes, had subsided. When a purported consumer inquired how long Premarin should be taken, Wyeth's doctor-spokesperson responded, "Anywhere from five to ten years in order to get protection from long term problems." And, with regard to

breast cancer risks, Wyeth represented to women that the benefits of taking estrogen "far outweigh[ed]" the risks for women unless they faced a particularly high risk of breast cancer.

29. Prior to 1995, Wyeth began to develop a combination therapy pill that would combine Premarin with progestin. This product development was necessary because Wyeth faced the threat of a shrinking market for Premarin at the end of its patent protection in 1995.

30. In 1995 Wyeth introduced Prempro, "combination" hormone therapy that contained estrogen and medroxyprogesterone acetate (synthetic progestins).

31. Wyeth led physicians and consumers to believe the promotional claims it made regarding Premarin. Likewise, when Wyeth introduced Prempro to the market, physicians and consumers were again led to believe that these attributes existed for this hormone therapy, as Wyeth had claimed about Premarin.

32. Wyeth over-promoted Prempro, just as it did Premarin. For example, Wyeth distributed a brochure that asked women to "Take a few minutes to think about the rest of your life," and then listed medical conditions to "think about" which neither Prempro nor Premarin had been approved by the FDA to treat, including Alzheimer's disease, vision problems, tooth loss, heart disease, and colon cancer.

33. In a magazine advertisement featuring model Lauren Hutton, Wyeth made a rash of similar claims, suggesting that its hormone therapy drugs were appropriate for treating or preventing, among other things, memory loss, colon cancer, and age-related vision loss. In the March 19, 2000, edition of *Parade Magazine,* Wyeth spokesperson Lauren Hutton (who was not identified as a Wyeth spokesperson) was asked what she did to look good and feel fit, and she answered: "[M]y number one secret is estrogen. It's good for your moods; it's good for your skin. If I had to choose between all my creams and makeup for feeling and looking good, I'd take the estrogen.

34. Wyeth's DTC (i.e., "direct-to-consumer" or "DTC" marketing) efforts have included overt advertising pieces, such as print advertisements, videotapes, and brochures directed to consumers,

on the prevention of heart disease and hip fractures, and any associated change in risk for breast and colon cancer. The study did not immediately address the short-term risks and benefits of hormones for the treatment of menopausal symptoms.

40. Women enrolled in the estrogen plus progestin study were randomly assigned to a daily dose of estrogen plus progestin (0.625 mg of conjugated equine estrogens plus 2.5 mg of medroxyprogesterone acetate) or to a placebo. Those participants receiving the drug (not placebo) received Wyeth's drug Prempro. Participants were enrolled in the study between 1993 and 1998 at over 40 clinical sites across the country.

41. In 2000 and again in 2001, WHI investigators complied with a recommendation from the study's Data and Safety Monitoring Board (DSMB) to inform participants of a small increase in heart attacks, strokes, and blood clots in women taking hormones. The DSMB, an independent advisory committee charged with reviewing results and ensuring participant safety, found that the actual number of women having any one of these events was small and did not cross the statistical boundary established to ensure participant safety. Therefore, the group recommended continuing the trial due to the still uncertain balance of risks and benefits.

42. At the DSMB's meeting on May 31, 2002, the data review revealed for the first time that the number of cases of invasive breast cancer in the estrogen plus progestin group had crossed the boundary established as a signal of increased risk. The DSMB's May 31, 2002 recommendation to stop the trial was based on the finding of increased breast cancer risk, supported by the evidence of overall health risks exceeding any benefits. On July 8, 2002, participants started receiving letters informing them about the results and telling them that they should stop study medications.

43. The WHI Study found that for the estrogen plus progestin group (i.e., those women who took Prempro) compared to placebo, overall there was a:

(I) 41 percent increase in strokes,

(ii) 29 percent increase in heart attacks,

as well as "product placement" efforts in which hormone therapy drugs are favorably positioned in entertainment vehicles or favorably described in the popular press by hired spokespersons.

35. Wyeth vigorously promoted hormone therapy to physicians, as well as to consumers directly. In 1999, Wyeth spent $34.7 million on DTC advertising for Prempro. In 2000, Wyeth spent $37.4 million on Prempro DTC advertising. The thrust of Wyeth's marketing efforts has been to create a lifelong consumer demand for hormone therapy, and a belief by physicians that the prescription is beneficial to menopausal and post-menopausal patients.

C. The WHI and NCI Studies

36. Wyeth's promotion of hormone therapy for long-term use proved false and misleading when studies released in July, 2002 showed that such use substantially increases the risk of *causing* disease.

37. Two large cohort studies concluded that the risks of hormone therapy outweighed the benefits for most women: The WHI study, reported at Roussow JE, et al., *Risks and Benefits of Estrogen Plus Progestin in Healthy Post-menopausal Women.* (JAMA. 2002 Jul 17; 288:321-33.); and, the NCI study, reported at Lacey JV Jr., et al., *Menopausal Hormone Replacement Therapy and Risk of Ovarian Cancer.* (JAMA. 2002 Jul 17; 288(3):334-41.)

38. The Women's Health Initiative (WHI) is a group focused on defining the risks and benefits of strategies that could potentially reduce the incidence of heart disease, breast and colorectal cancer, and fractures in post-menopausal women. Between 1993 and 1998, the WHI enrolled 161,809 post-menopausal women in the age range of 50 to 79 years into a set of clinical trials and an observational study at 40 clinical centers in the United States. Included within the clinical trials was a study by the National Heart, Lung, and Blood Institute (NHLBI) of the National Institutes of Health (NIH).

39. Participants in the NHLBI component of WHI, like most women with a uterus who take hormone therapy, were given progestin in combination with estrogen (i.e., combination hormone therapy). The estrogen plus progestin trial of the WHI involved 16,608 women ages 50 to 79 years with an intact uterus. An important objective of the trial was to examine the effect of estrogen plus progestin

(iii) 100 percent increase in venous thromboembolism (blood clots),

(iv) 22 percent increase in total cardiovascular disease,

(v) 26 percent increase in breast cancer,

(vi) 37 percent reduction in cases of colorectal cancer, and

(vii) one-third reduction in hip fracture rates.

44. The WHI Study concluded that the "Overall health risks exceeded benefits from use of combined estrogen plus progestin for an average 5.2-year follow-up among healthy post-menopausal US women." The Study also found that the combination hormone regimen should not be initiated or continued for primary prevention of coronary heart disease.

45. Because of the importance of the report from the WHI investigators on the estrogen plus progestin study, the study was released early to the public on July 9, 2002, as an expedited article on the *JAMA* Website. In commenting on the studies findings, NHLBI Director, Dr. Claude Lenfant, was unequivocal in his own conclusions:

> The cardiovascular and cancer risks of estrogen plus progestin outweigh any benefits—and a 26 percent increase in breast cancer risk is too high a price to pay, even if there were a heart benefit. Similarly, the risks outweigh the benefits of fewer hip fractures.

46. Dr. Jacques Roussow, acting director of the WHI and lead author of the JAMA article, summarized the risks of combination hormone therapy in a very straightforward manner as he explained the statistical significance of the study results:

> The WHI results tell us that during one year, among 10,000 post-menopausal women with a uterus who are taking estrogen plus progestin, ***eight more will have invasive breast cancer, seven more will have a heart attack, eight more will have a stroke, and 18 more will have blood clots, including eight with blood clots in the lungs***, than will a similar group of 10,000 women not taking these hormones. This is a relatively small annual increase in risk for an individual woman. Individual women who have participated in the trial and women in the population who have been on estrogen and progestin should not be unduly alarmed. However, even small individual risks over time, and on a population-wide basis, add up to ***tens of thousands of these serious adverse health events***.

(Emphasis added.)

47. Within a week after the WHI results were reported, another article appeared in JAMA related to the risk of long-term use of estrogen-only therapy. On July 17, 2002, JAMA published a NCI study, which found that women who took estrogen were more likely to develop ovarian cancer than those not on the hormone.

48. In the study, researchers from the NCI followed 44,241 women for 19 years who were taking only estrogen and found that these women had a 60 percent higher risk of ovarian cancer than women who had never used estrogen. The risk increased proportionately with longer duration of estrogen use. Women who took estrogen for 10 to 19 years had an 80 percent higher risk than those who did not take the pills. Those on the hormone therapy for 20 years or more were three times as likely to develop ovarian cancer as women who did not take it at all. Most of the NCI participants used Wyeth's brand of estrogen therapy, Premarin.

49. Lead author of the NCI study, Dr. James V. Lacey, summarized the results of his study with the following statement:

> The main finding of our study was that post-menopausal women who used estrogen replacement therapy for 10 or more years were at significantly higher risk of developing ovarian cancer than women who never used hormone replacement therapy.

50. Dr. Lacey further underscored the implications of his NCI study by explaining that the findings translate into one or two additional ovarian cancers each year per 10,000 women taking estrogen alone. In 2000, eight million American women took Premarin, the leading estrogen therapy pill. The Lacey study demonstrates that Premarin usage is responsible for up to 1,600 additional ovarian cancer cases in the year 2000 alone.

51. In October 2003, the WHI study produced a report with findings similar to the NCI study regarding ovarian cancer. The October 1, 2003, issue of JAMA reported that combination hormone therapy was also associated with increased risk for ovarian cancer: the WHI investigators found that women

randomized to received combined hormone therapy (i.e., estrogen plus progestin) experienced a 58 percent increase in ovarian cancer rates.

D. The Aftermath of the WHI and NCI Studies

52. The WHI and NCI studies received enormous media coverage: front-page newspaper headlines, magazine covers, and broadcast news programs urgently reported the alarming and significant findings.

53. Commenting on the WHI study, Dr. Leslie Ford, associate director for clinical research at the NCI's Division of Cancer Prevention, re-emphasized the risk of hormone therapy to patients:

> The reduction in colorectal cancer risk in the WHI is intriguing, but the balance of harm versus benefit does not justify any woman beginning or continuing to take estrogen plus progestin for this purpose.

54. Dr. Isaac Schiff of Massachusetts General Hospital also commented on the WHI study, noting, "Quality of life is very, very important . . . . From a heart and breast cancer point of view, the drug should be outlawed. But for hot flashes, there's nothing better."

55. The WHI and NCI study conclusions regarding the unsafe and dangerous adverse effects of hormone therapy have been verified by subsequent published research. A study on hormone therapy and breast carcinoma risk in Hispanic and non-Hispanic women, reported on September 1, 2002, in the journal *Cancer*, found that Hispanic post-menopausal women have significantly increased breast cancer risk after long-term hormone therapy.

56. On October 23, 2002, the United Kingdom's Medical Research Council announced that it had ended a clinical study of the risks and benefits of long-term use of hormone therapy for "scientific and practical reasons." Approximately 5,700 women were enrolled in the "WISDOM" study (the Women's International Study of Long Duration Oestrogen after Menopause). The study was to include 22,000 women. However, following the WHI study, the WISDOM study was canceled. The Medical Research Council concluded "There is strong evidence that taking hormone therapy long

term increases the risks of some diseases such as breast cancer and decreases the risks of others such as osteoporosis."

57. Because of the significance of its findings, on March 17, 2003, the New England Journal of Medicine (NEJM) released a follow-up WHI study two months in advance of its May 8, 2003 publication date. The follow-up study reported that hormone therapy failed to improve the quality of life for menopausal women.

58. The "Quality of Life" study which examined the same pool of 16,000 women as the July 9, 2002, WHI study, found that hormone therapy drugs do not do the very thing many women took them for in the first place, that is, to make them feel happier and healthier after menopause. A comparison of women who took hormone therapy to women given a placebo showed those women taking hormones did not report sleeping better or feeling better. The hormone therapy group also did not report feeling less depressed or more sexual satisfaction than the placebo group.

59. According to the study's lead author, Dr. Jennifer Hays: "It's just not something that's going to make most women feel better. Even if it reduces your symptoms, that's not going to translate into a meaningful effect on a quality of life." Dr. Deborah Grady of the University of California, in an accompanying commentary in same issue of the NEJM, said that: "There is no role for hormone therapy in the treatment of women without menopausal symptoms," and that only women who were experiencing debilitating menopausal symptoms should take hormone therapy. She stated further that those women who do continue with hormone therapy should take the lowest possible dose for the shortest possible time.

60. On May 21, 2003, JAMA published another study regarding the efficacy of estrogen plus progestin therapy (e.g., Prempro) for prevention of bone loss in elderly women. The study involved 373 women ages 65 to 90 who had either thinning bones or full-blown osteoporosis and took one of four treatments for three years: (I) combination hormone therapy alone, (ii) a bone-building drug,

alendronate (which is sold under the brand name, Fosamax), (iii) combination hormone therapy with Fosamax, or (iv) a placebo.

61. While the study found that the combination of hormone therapy and Fosamax was effective at treatment and prevention of post-menopausal osteoporosis, it also concluded that Fosamax alone was more effective than combination hormone therapy alone. After three years, hip bone density had increased nearly six percent in women on hormone therapy with Fosamax, four percent in those on Fosamax alone, and three percent in the hormones-only group.

62. WHI researcher Dr. Hays, the lead author of the May 8, 2003 JAMA study on hormone therapy and quality of life, said that the findings of the bone-loss study are not convincing enough to recommend hormone therapy for osteoporosis prevention even in older women, especially because the study showed that the bone-enhancing benefits from estrogen come only after long-term use which also carries the highest risk of breast cancer or heart disease.

63. On May 28, 2003, JAMA published yet another study on the effects of hormone therapy, this time focusing on the risk of Alzheimer's disease and other types of dementia. The study found that combination hormone therapy, consisting of both estrogen and progestin, doubled the risk of dementia for woman who started hormones at age 65 or older.

64. The dementia study was based on a four-year experiment involving 4,532 women at 39 medical centers, where half took placebos and half took Prempro. In four years, there were 40 cases of dementia in the Prempro group and 21 in the placebo group. Translated to an annual rate for the population-at-large, the results mean that for every 10,000 women 65 and older taking hormone therapy, there will be 45 cases of dementia a year with 23 of them attributable to hormone use.

65. Dr. Sally A. Shumaker, the director of the dementia study and a professor of public health sciences at Wake Forest University, stated that the study's "clear message is that there's no reason for older women to be taking combination hormone therapy."